

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1-16. (canceled)

17. (currently amended) A light control apparatus comprising:

a splitting device for splitting an input signal light to obtain a monitor light which is a part of the input light;

a photoelectric conversion device for converting the obtained monitor light into an electric signal; and

an opening and closing device that closes the optical transmission path by receiving the electric signal as a drive voltage so that the output light is cut off when the input light exceeds a threshold,

wherein said photoelectric conversion device is one or more semiconductor photovoltaic device.

18. (canceled)

19. (currently amended) The light control apparatus according to claim 17, wherein said ~~photoelectric conversion device is~~ one or more semiconductor photovoltaic device ~~having~~ has a nipi-type multijunction structure.

20. (previously presented) The light control apparatus according to claim 17, wherein said opening and closing device is an optical shutter using a micromachine.

21. (previously presented) The light control apparatus according to claim 17, wherein said opening and closing device is an optical device comprising one of an absorption-type modulator and a refractive index-type modulator.

22. (previously presented) The light control apparatus according to claim 17, wherein a voltage source is inserted between said photoelectric conversion device and said opening and closing device.

23. (previously presented) The light control apparatus according to claim 17, wherein at least two of said splitting device, said photoelectric conversion device, and said opening and closing device are disposed on a single planar optical circuit.

24. (previously presented) The light control apparatus according to claim 17, wherein said opening and closing device comprises a device for holding an opened and closed state controlled based on the electrical signal and a device for indicating the held opened and closed state.

25. (currently amended) A light control apparatus comprising:

a transmission and photoelectric conversion device for transmitting an input signal light and converting a part of the input signal light into an electric signal; and

an opening and closing degree control device for changing the opening and closing degree of an optical transmission path for transmitting the input signal light by receiving the electric signal as a drive voltage,

wherein said transmission and photoelectric conversion device is a semiconductor photovoltaic device having a stack-type structure.

26. (canceled)

27. (currently amended) The light control apparatus according to claim 25, wherein said ~~transmission and photoelectric conversion device is a stack-type~~ semiconductor photovoltaic device ~~having~~ has a nipi-type multijunction structure.

28. (previously presented) The light control apparatus according to claim 25, wherein said opening and closing degree control device is an optical shutter using a micromachine.

29. (previously presented) The light control apparatus according to claim 25, wherein said opening and closing degree control device is an optical device such as an absorption-type modulator or refractive index-type modulator.

30. (previously presented) The light control apparatus according to claim 25, wherein a voltage source is inserted between said transmission and photoelectric conversion device and said opening and closing degree control device.

31. (previously presented) The light control apparatus according to claim 25, wherein said transmission and photoelectric conversion device and opening and closing degree control device are disposed on a single planar optical circuit.

32. (previously presented) The light control apparatus according to claim 25, wherein said opening and closing degree control device comprises a device for holding an opened and closed state controlled based on the electrical signal and a device for indicating the held opened and closed state.

33. (currently amended) The light control apparatus according to claim 25, wherein said ~~transmission and photoelectric conversion device is a~~ semiconductor photovoltaic device ~~having~~ has a waveguide structure.

34. (currently amended) A light control apparatus comprising:

a transmission and photoelectric conversion device for transmitting an input signal light and converting a part of the input signal light into an electric signal; and

a cutoff device for cutting off an optical transmission path for transmitting the input signal light by receiving the electric signal as a drive voltage,

wherein said transmission and photoelectric conversion device is a semiconductor photovoltaic device having a stack-type structure.